

Notice of Allowability	Application No.	Applicant(s)	
	10/073,245	KATAOKA ET AL.	
	Examiner Cam Y T. Truong	Art Unit 2162	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address.*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 10/21/2005.
2. The allowed claim(s) is/are 1-47.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/21/05
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

1. Applicant has amended claims 1, 7, 13, 19, 25, 32, 39, 40 and 47 in the amendment filed on 10/21/2005.

Drawings

2. The filed drawings on 2/13/2005 is accepted.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 10/21/2005 is similar with IDS filed on 5/31/2005. Accordingly, the information disclosure statement is being considered by the examiner.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard A. Gollhofer, Registration No. 31, 106 on 11/7/2005.

Please replace claims 1-47 with claims 1-47.

1. (CURRENTLY AMENDED) A computer implemented file processing method for compressing a section of data and index data comprising:
 - dividing both the data and the index data into a plurality of sections, wherein the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, where each of the sections comprises the data and the index data, and the data comprises at least one of text data, image data, and audio data;
 - creating a conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency;
 - compressing each of the sections based on the conversion table created therefor using a corresponding one of a plurality of different compression parameters to obtain a compressed file;
 - storing the compressed file in a storage medium together with address information and the different compression parameters of the sections after compression; and
 - expanding at least one of the sections in the compressed file read from the storage medium using the corresponding one of a plurality of different compression parameters for each section.

2. (CURRENTLY AMENDED) The file processing method as claimed in claim 1, wherein said compressing uses the plurality of different compression parameters based on a distribution of an appearing frequency for each word within a file.

3. (CURRENTLY AMENDED) The file processing method as claimed in claim 1, wherein said compressing comprises a flag, which indicates non-compressed data in control information of a certain section, if data in the certain section has a larger amount of information in a form of compressed data than the non-compressed data.

4. (CURRENTLY AMENDED) The file processing method as claimed in claim 1, wherein said compressing comprises identification information of the different compression parameters in control information of each section.

5. (CURRENTLY AMENDED) The file processing method as claimed in claim 1, wherein said compressing adds end information, which indicates an end of a section to an end of each section, adds the end information to only a last section when the sections have a fixed length, and comprises a flag indicating that the end information is deleted in control information of the sections other than the last section.

6. (CURRENTLY AMENDED) The file processing method as claimed in claim 1, further comprising:

expanding the compressed file, which is read from the storage medium by driver software, which is independent of application software of a computer.

7. (CURRENTLY AMENDED) A data processing apparatus comprises a processor for compressing a section of data and index data, comprising:

a compressing process section to divide both the data and the index data into a plurality of sections, and to compress each of the sections based on a conversion table using a corresponding one of a plurality of different compression parameters to obtain a compressed file after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency,

wherein the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, where each of the sections comprises the data and the index data, and wherein the data comprises at least one of text data, image data, and audio data;

a storing process section to store the compressed file in a storage medium together with address information and the different compression parameters of the sections after compression; and

an expanding process section to expand at least one of the sections in the compressed file read from the storage medium using the corresponding one of a plurality of different compression parameters for each section.

8. (CURRENTLY AMENDED) The data processing apparatus as claimed in claim 7, wherein said compressing process section uses the plurality of different compression parameters based on a distribution of an appearing frequency for each word within a file.

9. (CURRENTLY AMENDED) The data processing apparatus as claimed in claim 7, wherein said compressing process section comprises a flag that indicates non-compressed data in control information of a certain section if data in the certain section has a larger amount of information in a form of compressed data than the non-compressed data.

10. (CURRENTLY AMENDED) The data processing apparatus as claimed in claim 7, wherein said compressing process section comprises identification information of the different compression parameters in control information of each section.

11. (CURRENTLY AMENDED) The data processing apparatus as claimed in claim 7, wherein said compressing process section adds end information, which indicates an end of a section to an end of each section, adds the end

information to only a last section when the sections have a fixed length, and comprises a flag indicating that the end information is deleted in control information of the sections other than the last section.

12. (CURRENTLY AMENDED) The data processing apparatus as claimed in claim 7, further comprising:

the expanding process section to expand the compressed file, which is read from the storage medium by driver software, which is independent of an application software of a computer.

13. (CURRENTLY AMENDED) A storage medium stores computer-readable information and a program for compressing a section of data and index data comprising:

compressing process means for causing a computer to divide both the data and the index data into a plurality of different sections, and to compress each of the sections based on a conversion table using a corresponding one of a plurality of different compression parameters to obtain a compressed file after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency,

wherein the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, where each of

the sections comprises the data and the index data, and wherein the data comprises at least one of text data, image data, and audio data;

storing process means for causing the computer to store the compressed file in storage means together with address information and the different compression parameters of the sections after compression; and

expanding process means for causing the computer to expand at least one of the sections in the compressed file read from the storage means using the corresponding one of a plurality of different compression parameters for each section.

14. (CURRENTLY AMENDED) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to use the plurality of different compression parameters based on a distribution of an appearing frequency for each word within a file.

15. (CURRENTLY AMENDED) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to comprise a flag, which indicates non-compressed data in control information of a certain section, if data in the certain section has a larger amount of information in a form of compressed data than the non-compressed data.

16. (CURRENTLY AMENDED) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to comprise

identification information of the different compression parameters in control information of each section.

17. (CURRENTLY AMENDED) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to add end information which indicates an end of a section to an end of each section, add the end information to only a last section when the sections have a fixed length, and comprise a flag indicating that the end information is deleted in control information of the sections other than the last section.

18. (ORIGINAL) The storage medium as claimed in claim 13, wherein the program further comprising:

expanding process means which causes the computer to expand the compressed file, which is read from the storage means by a driver software, which is independent of an application software of the computer.

19. (CURRENTLY AMENDED) A storage medium stores computer-readable information for compressing and expanding a section of data and index data, comprising:

a region storing a compressed file which is divided into a plurality of sections, wherein each of sections is compressed based on a conversion table using a corresponding one of a plurality of different compression parameters after creating the conversion table for each section by selecting a predetermined

number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency;

 a region storing address information of the sections and the different compression parameters thereof, wherein each of the sections comprises both the data and index data, where the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, and wherein the data comprises at least one of text data, image data, and audio data; and

 a region expanding at least one of the sections in the compressed file read from the storage medium using the corresponding one of the plurality of different compression parameters for each section.

20. (CURRENTLY AMENDED) The storage medium as claimed in claim 19, wherein the different compression parameters are based on a distribution of an appearing frequency for each word within said compressed file.

21. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 19, wherein a flag, which indicates non-compressed data, is comprised in control information of a certain section if data in the certain section has a larger amount of information in a form of compressed data than the non-compressed data.

22. (CURRENTLY AMENDED) The storage medium as claimed in claim 19, wherein identification information of the different compression parameters is comprised in control information of each section.

23. (CURRENTLY AMENDED) The storage medium as claimed in claim 19, wherein end information, which indicates an end of a section, is added to an end of each section, the end information is added to only a last section when the sections have a fixed length, and a flag indicating that the end information is deleted is comprised in control information of the sections other than the last section.

24. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 19, further storing:

a driver software is independent of application software of a computer, said driver software comprising a program provided with expanding process means for causing the computer to expand the compressed file which is read from the storage medium.

25. (Currently Amended) A computer implemented file processing method for retrieving a section of data and index data, comprising:

a reading step accesses a storage medium which stores a plurality of different compression parameters, address parameters, and a compressed file formed from an original file, divided into a plurality of sections and compressed for

each section based on a conversion table using a corresponding one of the plurality of different compression parameters,

wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections, and

wherein each of the sections comprises both the data and the index data, where the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, wherein the data comprises at least one of text data, image data, and audio data; and

an expanding step, which expands the section data in the compressed file, read from the storage medium by said reading step using the different compression parameters corresponding to the section data.

26. (CURRENTLY AMENDED) The file processing method as claimed in claim 25, wherein the plurality of different compression parameters are created based on a distribution of an appearing frequency for each word within said original file.

27. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 25, wherein the compressed file further comprises non-compressed

section data of a certain section and a non-compression flag which indicates that the certain section is non-compressed, and said expanding step suppresses expansion of the certain section when the non-compression flag indicates a non-compressed state of the section data of the certain section read from the storage medium by said reading step.

28. (CURRENTLY AMENDED) The file processing method as claimed in claim 25, wherein identification information of the different compression parameters is comprised in control information of each section.

29. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 25; wherein a delete flag, which indicates that end information indicating an end of each section is not added to the section data, is comprised in control information of each section, and said reading step reads the section data by judging a last section based on the delete flag.

30. (ORIGINAL) The file processing method as claimed in claim 25, wherein said expanding step is carried out by a driver software for the storage medium, said driver software being used for making access to the storage medium.

31. (CURRENTLY AMENDED) The file processing method as claimed in claim 30, wherein the driver software for the storage medium is independent of application software of a computer.

32. (CURRENTLY AMENDED) A data processing apparatus comprises a processor for compressing and expanding a section of data and index data, comprising:

a reading process section to control access to a storage medium which stores a plurality of different compression parameters, address parameters, and a compressed file formed from an original file, divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters,

wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections, and

wherein each of the sections comprises both the data and the index data, where the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, wherein the data comprises at least one of text data, image data, and audio data; and

an expanding process section to expand the section data in the compressed file read from the storage medium by said reading process section using the different compression parameters corresponding to the section data.

33. (CURRENTLY AMENDED) The data processing apparatus as claimed in claim 32, wherein the plurality of different compression parameters are created based on a distribution of an appearing frequency for each word within said original file.

34. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 32, wherein the compressed file further comprises non-compressed section data of a certain section and a non-compression flag which indicates that the certain section is non-compressed, and said expanding process section suppresses expansion of the certain section when the non-compression flag indicates a non-compressed state of the section data of the certain section read from the storage medium by said reading process section.

35. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 32, wherein identification information of the different compression parameters is comprised in control information of each section.

36. (ORIGINAL) The data processing apparatus as claimed in claim 32, wherein a delete flag, which indicates that end information indicating an end of

each section is not added to the section data, is comprised in control information of each section, and said reading process section controls reading of the section data by judging a last section based on the delete flag.

37. (ORIGINAL) The data processing apparatus as claimed in claim 32, wherein said expanding process section carries out expansion by a driver software for the storage medium, said driver software being used for making access to the storage medium.

38. (ORIGINAL) The data processing apparatus as claimed in claim 37, wherein the driver software for the storage medium is independent of application software of the data processing apparatus.

39. (CURRENTLY AMENDED) A data processing apparatus comprise a processor for retrieving a section of data and index data, comprising:

a reading process section to control an access to a storage medium which stores a plurality of different compression parameters, address parameters, and a compressed file in response to a read request from an application software, the compressed file formed from an original file, divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters,

wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing

frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections, and

wherein each of the sections comprises both the data and the index data, where the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, wherein the data comprises at least one of text data, image data, and audio data; and

an expanding process section to expand the section data in the compressed file read from the storage medium by said reading process section using the different compression parameters corresponding to the section data, and to supply expanded data to the application software.

40. (CURRENTLY AMENDED) A storage medium stores computer-readable information and stores a program for compressing and expanding a section of data and index data, comprising:

reading process means for causing a computer to control access to a recording medium which stores a plurality of different compression parameters, address parameters, and a compressed file formed from an original file, divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters,

wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections, and

wherein each of the sections comprises both the data and the index data, where the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, wherein the data comprises at least one of text data, image data, and audio data; and

expanding process means for causing the computer to expand the section data in the compressed file read from the recording medium by said reading process means using the different compression parameters corresponding to the section data.

41. (CURRENTLY AMENDED) The storage medium as claimed in claim 40, wherein the plurality of different compression parameters are created based on a distribution of an appearing frequency for each word within said original file.

42. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 40, wherein the compressed file further comprises non-compressed section data of a certain section and a non-compression flag which indicates that the certain section is non-compressed, and said expanding process means causes

the computer to suppress expansion of the certain section when the non-compression flag indicates a non-compressed state of the section data of the certain section read from the recording medium by said reading process.

43. (CURRENTLY AMENDED) The storage medium as claimed in claim 40, wherein identification information of the different compression parameters is comprised in control information of each section.

44. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 40, wherein a delete flag, which indicates that end information indicating an end of each section is not added to the section data, is comprised in control information of each section, and said reading process means causes the computer to control reading of the section data by judging a last section based on the delete flag.

45. (ORIGINAL) The storage medium as claimed in claim 40, wherein said expanding process means causes the computer to carry out expansion by a driver software for the recording medium, said driver software being used for making access to the recording medium.

46. (ORIGINAL) The storage medium as claimed in claim 45, wherein the driver software for the recording medium is independent of an application software of the computer.

47. (CURRENTLY AMENDED) A storage medium stores computer-readable information and a program for retrieving a section of data and index data, comprising:

reading process means for causing a computer to control access to a recording medium which stores a plurality of different compression parameters, address parameters, and a compressed file, in response to a read request from application software, the compressed file formed from an original file, divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters,

wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections, and

wherein each of the sections comprises both the data and the index data, where the index data is different from the data, the index data corresponds to the data and is used to search or retrieve the data, wherein the data comprises at least one of text data, image data, and audio data; and

expanding process means for causing the computer to expand the section data in the compressed file read from the recording medium by said reading

process means using the different compression parameters corresponding to the section data, and supply expanded data to the application software.

Allowable Subject Matter

5. Claims 1-47 are allowed.

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 1, wherein "creating a conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency; compressing each of the sections based on the conversion table created therefor using a corresponding one of a plurality of different compression parameters to obtain a compressed file; expanding at least one of the sections in the compressed file read from the storage medium using the corresponding one of a plurality of different compression parameters for each section";

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claims 7 and 13, wherein, "to compress each of the sections based on a conversion table using a corresponding one of a plurality of different compression parameters to obtain a compressed file after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency; to expand at least one of the sections in the compressed file read from the storage medium

using the corresponding one of a plurality of different compression parameters for each section”;

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 19, wherein “each of sections is compressed based on a conversion table using a corresponding one of a plurality of different compression parameters after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency; a region expanding at least one of the sections in the compressed file read from the storage medium using the corresponding one of a plurality of different compression parameters for each section”;

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim25, wherein “a compressed file formed from an original file divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters, wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding

to a plurality of sections; an expanding step, which expands the section data in the compressed file, read from the storage medium by said reading step using the different compression parameters corresponding to the section data”;

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claims 32 and 39, wherein “a compressed file formed an original file being divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters, wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections; to expand the section data in the compressed file read from the storage medium by said reading process section using the different compression parameters corresponding to the section data”; and

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claims 40 and 47, wherein “a compressed file formed an original file being divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters, wherein the conversion table is created for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency,

decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections; expand the section data in the compressed file read from the recording medium by said reading process means using the different compression parameters corresponding to the section data".

The dependent claims, bring definite, further limiting, and fully enabled by the specification are also allowed.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Examiner
Art Unit 2162